

Building Earthquake Proof Bridges

Building Parameters:

- Your bridge must:
 - Be at least 30 cm long.
 - Be at least 5 cm wide.
 - Be able to span a gap of 25-26cm.
 - Have a 1cm hole in the center of the bridge to hold the test weight.
 - Be able to be clamped down at one end (for testing)
- Materials allowed per group:
 - 4 long wooden sticks
 - toothpicks (1 box)
 - glue(white or hot)
 - 2 sheets of paper
 - string
- Before Building
 - You must decide what type of materials you will be using
 - You must test the properties of your building materials so you can make the most earthquake resistant bridge possible.
 - You must decide what type of bridge you will build
 - Your group should have detailed drawing with metric measurements. Be sure to provide multiple views of your bridge, or each part if you assembled separate pieces before putting it all together.
- During Building
 - You must keep a daily written record of your progress.
 - Include everything you do each day, changes, construction, etc.
 - Be sure to write this clearly, it will be graded as part of your write up!